

STADIA SURVEY NOTES

AREA HOWARD PASS STATE or PROVINCE NPRA ALASKA PAGE No. 191
 LINE No.(s) R-2B PARTY No. 1184 DATE 13th Day MARCH Mo. 1978 Yr. BOOK No. _____
 SURVEYOR J. McKAY RODMAN J. Scherr WEATHER: Cloudy & Foggy P.T.S. No. _____

| LINE | Bearing of Sight | Stadia Distance | BEAMAN OR VERNIER | | | ROD READING | | | Angular Elev. Diff. | Final Elev. Diff. | ELEVATIONS | | A.B.S. OF S. - S.S. | Station | REMARKS |
|------|------------------|-----------------|-------------------|--------------|-----------------|-------------|---------|-------------|---------------------|-------------------|-------------|--------|---------------------|---------|----------------------------|
| | | | Level | Inclined | Angle or Factor | Hair Read | Reading | Correc-tion | | | Center Hair | INST. | | | |
| 1 | | | | TANG OFF | | TR-35 | Elev. | | | | | | | | This Elev. is located at |
| 2 | | | | SP-797 +1 | | ON LINE R2 | | | | | | | | | It was tied down to |
| 3 | | | | Bar monument | | 78160 | | | | | | | | | by Reciprocal angles refer |
| 4 | | | | to page 188 | | LINE 10 | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | 2258.4 | 0 | | | TR-35 = SP-797 + 1 |
| 7 | E | 505 | | 94-55-41 | | | | 14.0 | +57.4 | +57.4 | 2315.8 | | | | A |
| 8 | " | | | 245-04-11 | | | | 14.0 | +57.4 | | | | | | A |
| 9 | " | 1660 | | 96-03-44 | | | | 4.0 | | -73.7 | | 2242.1 | | 150 | |
| 10 | " | 220 | | 98-56-51 | | | | 4.0 | | -38.2 | | 2277.6 | | 151 | |
| 11 | W | 220 | | 89-29-40 | | | | 1.0 | +0.9 | +0.9 | | 2316.7 | 0 | 152 | |
| 12 | " | | | 290-30-11 | | | | 1.0 | +0.9 | | | | 0 | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | E | 2640 | | 89-54-44 | | | | 5.0 | -91.2 | -91.3 | | 2225.4 | | | A |
| 15 | " | | | 216-05-35 | | | | 5.0 | -91.4 | | | | | | A |
| 16 | " | 2200 | | 88-25-02 | | | | 5.0 | | +55.8 | | 2281.2 | | 153 | |
| 17 | " | 1760 | | 91-15-42 | | | | 5.0 | | -43.8 | | 2181.6 | | 154 | |
| 18 | " | 1320 | | 93-46-40 | | | | 4.0 | | -91.0 | | 2134.4 | | 155 | |
| 19 | " | 880 | | 95-15-23 | | | | 4.0 | | -84.5 | | 2140.9 | | 156 | |
| 20 | " | 440 | | 96-01-32 | | | | 4.0 | | -50.2 | | 2175.2 | | 157 | |

TI-588B

WORKED BY _____

CHECKED BY 1st _____

2nd _____

STADIA SURVEY NOTES

AREA HOWARD Pass STATE or PROVINCE N.P.R.A ALASKA PAGE No. 192
 LINE No.(s) R-2B PARTY No. 1184 DATE 13th Day MARCH Mo. 1978 Yr. BOOK No. _____
 SURVEYOR J. McKay RODMAN J. Schorr WEATHER: CLOUDY & FOGGY P.T.S. No. _____

| LINE | Bearing of Sight | Stadia Distance | BEAMAN OR VERNIER | | | ROD READING | | | | Angular Elev. Diff. | Final Elev. Diff. | ELEVATIONS | | Station | REMARKS |
|------|------------------|-----------------|-------------------|-----------|-----------------|-------------|---------|-------------|-------------|---------------------|-------------------|------------|-----|---------|---------|
| | | | Level | Inclined | Angle or Factor | Hair Read | Reading | Correc-tion | Center Hair | | | INST. | ROD | | |
| 1 | | | | | | | | | | | | 2225.4 | | | |
| 2 | — | 0 | — | | | | | | | | | | | 158 | |
| 3 | W | 440 | | 85-17-41 | | | | 4.0 | | +32.1 | | 2257.5 | | 159 | |
| 4 | " | 880 | | 85-19-29 | | | | 4.0 | | +62.7 | | 2293.1 | | 160 | |
| 5 | " | 1320 | | 85-22-27 | | | | 5.0 | | +101.5 | | 2326.9 | | 161 | |
| 6 | " | 1760 | | 85-22-57 | | | | 10.0 | +131.7 | +129.3 | | 2354.7 | 0 | 162 | E.O.L. |
| 7 | " | | | 274-27-34 | | | | 10.0 | +126.8 | | | | 0 | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |

TI-588B

WORKED BY _____

CHECKED BY 1st _____

2nd _____

STADIA SURVEY NOTES

AREA Howard Pass STATE or PROVINCE NPRA ALASKA PAGE No. 193
 LINE No.(s) R-2B PARTY No. 1184 DATE 13th Day MARCH Mo. 1978 Yr. BOOK No. _____
 SURVEYOR J. McKay RODMAN J. Schorr WEATHER: Cloudy & foggy P.T.S. No. _____

| LINE | Bearing of Sight | Stadia Distance | BEAMAN OR VERNIER | | | ROD READING | | | Center Hair | Angular Elev. Diff. | Final Elev. Diff. | ELEVATIONS | | A.B.S. OF S. - S.S. | Station | REMARKS |
|------|------------------|-----------------|-------------------|-----------|-----------------|-------------|---------|-------------|-------------|---------------------|-------------------|------------|----------------|---------------------|---------|---------|
| | | | Level | Inclined | Angle or Factor | Hair Read | Reading | Correc-tion | | | | INST. | ROD | | | |
| 1 | | | Refer to page | | | 191 | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | 2258.4 | | TR-38 | | |
| 7 | W | 725 | | 86-24-57 | | | | 5.0 | -40.3 | -40.4 | 2218.0 | | A | | | |
| 8 | " | | | 273-35-38 | | | | 5.0 | -40.4 | | | | A ₁ | | | |
| 9 | | 0 | | | | | | 5.8 | | -5.8 | | 2212.2 | | 149 | | |
| 10 | E | 440 | | 94-43-26 | | | | 4.0 | | -40.2 | | 2177.8 | | 148 | | |
| 11 | " | 880 | | 94-48-02 | | | | 4.0 | | -77.6 | | 2140.4 | | 147 | | |
| 12 | " | 1320 | | 94-53-35 | | | | 4.0 | | -116.6 | | 2101.4 | | 146 | | |
| 13 | " | 1760 | | 94-56-22 | | | | 4.0 | | -155.5 | | 2062.5 | | 145 | | |
| 14 | " | 2200 | | 94-49-59 | | | | 4.0 | | -189.4 | | 2028.6 | | 144 | | |
| 15 | " | 2650 | | 94-36-51 | | | | 10.0 | -223.2 | -222.9 | | 1995.1 | | 143 | | |
| 16 | " | | | 265-23-45 | | | | 10.0 | -223.7 | | | | | 143 | | |
| 17 | | | | | | | | | | | | | | | | |
| 18 | W | 2640 | | 87-11-10 | | | | 5.0 | -124.6 | -124.9 | 1870.2 | | A | | | |
| 19 | " | 2640 | | 272-49-26 | | | | 5.0 | -125.2 | | | | A ₁ | | | |
| 20 | " | 2200 | | 87-26-26 | | | | 4.0 | | +94.2 | | 1964.4 | | 142 | | |

TI-588B

WORKED BY _____

CHECKED BY 1st _____

2nd _____

STADIA SURVEY NOTES

AREA Howard Pass STATE or PROVINCE NPRA ALABAMA PAGE No. 194
 LINE No.(s) R-2B PARTY No. 1184 DATE 13th Day MARCH Mo. 1978 Yr. BOOK No. _____
 SURVEYOR J. McHAY RODMAN D. Schorr WEATHER: Cloudy & Foggy P.T.S. No. _____

| LINE | Bearing of Sight | Stadia Distance | BEAMAN OR VERNIER | | | ROD READING | | | Center Hair | Angular Elev. Diff. | Final Elev. Diff. | ELEVATIONS | | Station | REMARKS |
|------|------------------|-----------------|-------------------|-----------|-----------------|-------------|---------|-------------|-------------|---------------------|-------------------|------------|-----|---------|---------|
| | | | Level | Inclined | Angle or Factor | Hair Read | Reading | Correc-tion | | | | INST. | ROD | | |
| 1 | | | | | | | | | | | 1870.2 | | | | |
| 2 | W | 1760 | | 87-29-55 | | | | 4.0 | | +72.8 | | 1943.0 | 141 | | |
| 3 | " | 1320 | | 87-42-55 | | | | 4.0 | | +48.6 | | 1919.8 | 140 | | |
| 4 | " | 880 | | 88-02-59 | | | | 4.0 | | +25.9 | | 1896.1 | 139 | | |
| 5 | " | 440 | | 88-57-30 | | | | 9.0 | | +4.0 | | 1874.2 | 138 | | |
| 6 | - | 0 | | | | | | 5.8 | | -5.8 | | 1864.4 | 137 | | |
| 7 | E | 440 | | 92-43-48 | | | | 4.0 | | -25.0 | | 1845.2 | 136 | | |
| 8 | " | 880 | | 92-52-26 | | | | 4.0 | | -48.1 | | 1822.1 | 135 | | |
| 9 | " | 1320 | | 92-58-05 | | | | 4.0 | | -70.4 | | 1799.8 | 134 | | |
| 10 | " | 1760 | | 92-32-09 | | | | 4.0 | | -81.9 | | 1788.3 | 133 | | |
| 11 | " | 2200 | | 92-31-55 | | | | 4.0 | | -101.2 | | 1769.0 | 132 | | |
| 12 | " | 2640 | | 92-15-08 | | | | 11.0 | -113.7 | -113.7 | | 1756.5 | 0 | 131 | |
| 13 | " | | | 267-45-06 | | | | 10.0 | -113.6 | | | | 0 | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | W | 2640 | | 88-37-06 | | | | 5.0 | -58.7 | -58.9 | 1697.6 | | A | | |
| 16 | " | 2640 | | 271-23-27 | | | | 5.0 | -59.1 | | | | A | | |
| 17 | " | 2200 | | 88-43-14 | | | | 4.0 | | +43.7 | | 1741.3 | 130 | | |
| 18 | " | 1760 | | 88-45-27 | | | | 4.0 | | +34.2 | | 1731.8 | 129 | | |
| 19 | " | 1320 | | 88-41-37 | | | | 4.0 | | +26.1 | | 1723.7 | 128 | | |
| 20 | " | 880 | | 88-37-52 | | | | 4.0 | | +17.0 | | 1714.6 | 127 | | |

TI-598B

WORKED BY _____

CHECKED BY 1st _____

2nd _____

STADIA SURVEY NOTES

AREA Howard pass STATE or PROVINCE NPRA ALASKA PAGE No. 195
 LINE No.(s) R-2B PARTY No. 1184 DATE 13th Day MARCH Mo. 1978 Yr. BOOK No. _____
 SURVEYOR J. McKay RODMAN J. Schorr WEATHER: Cloudy, foggy & snow P.T.S. No. _____

| LINE | Bearing of Sight | Stadia Distance | BEAMAN OR VERNIER | | | ROD READING | | | | Angular Elev. Diff. | Final Elev. Diff. | ELEVATIONS | | Station | REMARKS |
|------|------------------|-----------------|-------------------|-----------|-----------------|-------------|---------|-------------|-------------|---------------------|-------------------|------------|-----|---------|---------|
| | | | Level | Inclined | Angle or Factor | Hair Read | Reading | Correc-tion | Center Hair | | | INST. | ROD | | |
| 1 | | | | | | | | | | | | 1697.6 | | | |
| 2 | W | 440 | | 88-56-57 | | | | 4.0 | | +4.1 | | 1701.7 | | 126 | |
| 3 | - | 0 | - | | | | | 5.8 | | -5.8 | | 1691.8 | | 125 | |
| 4 | E | 440 | | 91-02-59 | | | | 4.0 | | -12.1 | | 1685.5 | | 124 | |
| 5 | " | 880 | | 90-57-57 | | | | 4.0 | | -18.8 | | 1678.8 | | 123 | |
| 6 | " | 1320 | | 91-05-18 | | | | 4.6 | | -29.1 | | 1668.5 | | 122 | |
| 7 | " | 1760 | | 91-06-19 | | | | 10.0 | | -43.9 | | 1653.7 | | 121 | |
| 8 | " | 2200 | | 91-05-32 | | | | 14.0 | | -55.9 | | 1641.7 | | 120 | |
| 9 | " | 2640 | | 91-08-51 | | | | 15.0 | -67.9 | -67.8 | | 1629.8 | ⊙ | 119 | |
| 10 | " | | | 268-51-26 | | | | 15.0 | -67.7 | | | | ⊙ | | |
| 11 | | | | | | | | | | | | | | | |
| 12 | W | 2640 | | 88-45-18 | | | | 5.0 | -52.4 | -52.5 | 1577.3 | | | Δ | |
| 13 | " | 0 | | 271 15.10 | | | | 5.0 | -52.7 | | | | | Δ | |
| 14 | " | 2200 | | 88-48-04 | | | | 4.0 | | +42.0 | | 1619.3 | | 118 | |
| 15 | " | 1760 | | 88-50-15 | | | | 4.0 | | +21.7 | | 1609.0 | | 117 | |
| 16 | " | 1320 | | 88-54-15 | | | | 4.0 | | +21.2 | | 1598.5 | | 116 | |
| 17 | " | 886 | | 89-01-18 | | | | 4.0 | | +11.0 | | 1588.3 | | 115 | |
| 18 | " | 440 | | 89-05-43 | | | | 4.0 | | +2.9 | | 1580.2 | | 114 | |
| 19 | - | 0 | - | | | | | 5.8 | | -5.8 | | 1571.5 | | 113 | |
| 20 | E | 440 | | 91-10-26 | | | | 4.0 | | -13.0 | | 1560.3 | | 112 | |

TI-588B

WORKED BY _____

CHECKED BY 1st _____

2nd _____

STADIA SURVEY NOTES

AREA Howard Pass STATE or PROVINCE N.P.R.A. ALASKA PAGE No. 196
 LINE No.(s) R-2B PARTY No. 1184 DATE 13th Day March Mo. 1978 Yr. BOOK No. _____
 SURVEYOR J. McKay RODMAN J. Schell WEATHER: Cloudy, foggy & snow P.T.S. No. _____

| LINE | Bearing of Sight | Stadia Distance | BEAMAN OR VERNIER | | | ROD READING | | | | Angular Elev. Diff. | Final Elev. Diff. | ELEVATIONS | | A.S. OF S. - S.S. | Station | REMARKS |
|------|------------------|-----------------|-------------------|-----------|-----------------|-------------|---------|-------------|-------------|---------------------|-------------------|------------|-----|-------------------|---------|---------|
| | | | Level | Inclined | Angle or Factor | Hair Recd | Reading | Correc-tion | Center Hair | | | INST. | ROD | | | |
| 1 | | | | | | | | | | | | 1577.3 | | | | |
| 2 | E | 880 | | 91-14-36 | | | | | 4.0 | -23.1 | | 1554.2 | | 111 | | |
| 3 | " | 1320 | | 91-06-47 | | | | | 4.0 | -29.6 | | 1547.1 | | 110 | | |
| 4 | " | 1760 | | 90-20-25 | | | | | 4.0 | -14.5 | | 1562.8 | | 109 | | |
| 5 | " | 2200 | | 90-07-38 | | | | | 4.0 | -8.9 | | 1568.4 | | 108 | | |
| 6 | " | 2640 | | 90-00-17 | | | | | 5.0 | -5.2 | -5.1 | 1572.2 | 0 | 107 | | |
| 7 | " | 2640 | | 269-59-56 | | | | | 5.0 | -5.1 | | | 0 | | | |
| 8 | | | | | | | | | | | | | | | | |
| 9 | W | 2200 | | 90 44 06 | | | | | 5.0 | +33.2 | +33.1 | 1605.3 | | | | |
| 10 | " | 2200 | | 269 16 11 | | | | | 5.0 | +33.6 | | | | | | |
| 11 | " | 1760 | | 90 47 05 | | | | | 4.0 | -28.1 | | 1577.2 | | 106 | | |
| 12 | " | 1320 | | 90 55 30 | | | | | 4.0 | -25.3 | | 1580.0 | | 105 | | |
| 13 | " | 880 | | 91 06 37 | | | | | 4.0 | -21.1 | | 1584.2 | | 104 | | |
| 14 | " | 440 | | 91 30 39 | | | | | 4.0 | -15.6 | | 1589.7 | | 103 | | |
| 15 | - | 0 | - | | | | | | 5.8 | -5.8 | | 1599.5 | | 102 | | |
| 16 | E | 440 | | 88 07 10 | | | | | 4.0 | +10.4 | | 1615.7 | | 101 | | |
| 17 | " | 880 | | 87 42 33 | | | | | 5.0 | +30.2 | +30.2 | 1635.5 | 0 | 100 | | E.O.L. |
| 18 | " | | | 272 17 32 | | | | | 5.0 | +30.2 | | | 0 | | | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |

TI-588E

WORKED BY _____ CHECKED BY 1st _____ 2nd _____

STADIA SURVEY NOTES

AREA Howard Pass STATE or PROVINCE NPRA ALASKA PAGE No. 197
 LINE No.(s) R-2B PARTY No. 1184 DATE 13th Day March Mo. 1978 Yr. BOOK No. _____
 SURVEYOR J. McKay RODMAN J. Scharr WEATHER: Cloudy, Foggy & Snow P.T.S. No. _____

| LINE | Bearing of Sight | Stadia Distance | BEAMAN OR VERNIER | | | ROD READING | | | | Angular Elev. Diff. | Final Elev. Diff. | ELEVATIONS | | ▲B.S. OF.S. -S.S. | Station | REMARKS |
|------|------------------|-----------------|--------------------------------------------|-----------|-----------------|-------------|---------|-------------|-------------|---------------------|-------------------|------------|-----|-------------------|------------------------|---------|
| | | | Level | Inclined | Angle or Factor | Hair Read | Reading | Correc-tion | Center Hair | | | INST. | ROD | | | |
| 1 | | | The following is a Reciprocal Angle Survey | | | | | | | | | | | | | |
| 2 | | | to tie down the East end of line R-2B | | | | | | | | | | | | | |
| 3 | | | using HP-65 PROGRAM | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | TP-5 = SP-10040 E.O.I. | |
| 5 | | T-meter | | | | | H.I. | | | | | | | | TP-6 = TBM 78160 | |
| 6 | | | | | | | | | | | | | | | | |
| 7 | E | 7886.32 | | 89-30-57 | | | 5.8 | | | | | | | | TP-5 ~ TP-6 | |
| 8 | " | | | 270-29-06 | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | |
| 11 | W | 7886.32 | | 90-29-31 | | | 5.8 | | | | | | | | TP-6 ~ TP-5 | |
| 12 | " | | | 269-30-45 | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | 1635.5 | | | TP-5 Ekv. | |
| 15 | | | | | | | | | | | | + 67.1 | | | Rec. angle difference | |
| 16 | | | | | | | | | | | | 1702.6 | | | Final Ekv. | |
| 17 | | | | | | | | | | | | 1703.4 | | | TBM Ekv. | |
| 18 | | | | | | | | | | | | -0.8 | | | VER. Mistie | |
| 19 | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | |

TI-588B

WORKED BY _____ CHECKED BY 1st _____ 2nd _____